

### Abstract of the Disclosure

The invention relates to a fuel injector for injecting fuel into a combustion chamber (23) of an internal combustion engine. The fuel injector (18) includes a pressure booster (3), whose booster piston (4) separates a work chamber (5), subjected to fuel via a pressure reservoir (1, 2), from a pressure-relievable differential pressure chamber (6). A pressure change in the differential pressure chamber (6) is effected via an actuation of a servo valve (24), which opens or closes a hydraulic connection (21, 39, 42) of the differential pressure chamber 6) to a first low-pressure-side return (28). The servo valve (24) has a servo valve piston (32) guided between a control chamber (36) and a first hydraulic chamber (38). On 10 this servo valve piston, a hydraulic face (44) that positions the servo valve piston (32) constantly in the opening direction when system pressure is applied and a first sealing seat (40) that closes or opens a low-pressure-side return (28) are embodied.

(Fig. 1)